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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,466	06/12/2001	Thomas Holderbaum	H 3517 PCT/U	2843

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EXAMINER
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DOUYON, LORNA M

ART UNIT	PAPER NUMBER
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1751

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DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/743,466		Applicant(s) HOLDERBAUM ET AL.	
	Examiner Lorna M. Douyon		Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 June 2001.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other:  |

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***Claim Objections***

1. Claim 1 is objected to because of the following informalities: this claim does not end with a period. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 1-3, 10, 12, 14, 18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Addison (US Patent No. 6,274,538), hereinafter "Addison".

Addison teaches a washing detergent in the form of a tablet comprising one or more detergent compositions and wherein at least one detergent composition is compressed and dissolves in a dishwashing machine in less than three minutes (see col. 1, lines 9-13; 44-48).

Addison also teaches a detergent tablet comprising a compressed layer which comprises a pre-

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prepared depression or mould into which a non-compressed layer is delivered (see col. 5, lines 19-21), the non-compressed layer comprising a solidified melt wherein the melt is prepared by heating a composition comprising a finishing additive and any optional detergent and/or carrier components(s) to above its melting point to form a flowable melt (see col. 5, lines 34-40). In Example 2, Addison teaches a multi-layer detergent tablet comprising a compressed layer containing 26.40 wt% citrate, 26.40 wt% silicate, 1.50 wt% nonionic surfactant and non-compressed layer containing bicarbonate, citric acid, enzymes and polyethylene glycol (see col. 48, line 50 to col. 49, line 35). Addison teaches the limitations of the instant claims. Hence, Addison anticipates the claims.

4. Claims 1-3, 10, 12, 14, 18, 21 and 22 are rejected under 35 U.S.C. 102(e) as anticipated by Painter (US Patent No. 6,303,561), hereinafter "Painter".

Painter teaches a detergent tablet comprising a compressed portion and a non-compressed portion wherein a) the compressed portion comprises compressed detergent components and a cavity extending from a first exterior surface of the compressed portion to a second exterior surface of the compressed portion, and b) the non-compressed portion is retained within said cavity (see abstract; col. 2, line 66 to col. 3, line 3). Painter also teaches that the non-compressed layer comprises a solidified melt, wherein the melt is prepared by heating a composition comprising a detergent component and optional carrier component(s) to above its melting point to form a flowable melt (see col. 4, lines 1-15). In Example 1, Painter teaches a detergent tablet

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comprising a compressed layer containing 26.40 wt% citrate, 26.40 wt% silicate, 1.50 wt% nonionic surfactant and non-compressed layer containing bicarbonate, citric acid, enzymes and polyethylene glycol (see col. 46, line 60 to col. 48, line 8). Painter also teaches that the non-compressed portion may be delivered to the compressed portion by using a nozzle feeder or extruder (see col. 8, lines 54-63). Painter teaches the limitations of the instant claims. Hence, Painter anticipates the claims.

5. Claims 1-3, 10, 12, 14, 18, 21 and 22 are rejected under 35 U.S.C. 102(e) as anticipated by Metzger-Groom (US Patent No. 6,358,911).

Metzger-Groom teaches detergent tablets containing a compressed portion having a mould and a non-compressed portion wherein the noncompressed portion is delivered to the mould (see col. 3, line 64 to col. 4, line 6), the non-compressed portion may contain polyethylene glycols (see col. 4, lines 29-30; col. 5, lines 37-41, 67; col. 6, lines 39-42) and the non-compressed portion comprises encapsulated perfumes, having a particulate size of 50-150 microns, which is dusted with silica (see col. 10, lines 3-41), and may be coated with a coating layer such as fatty acids (see col. 7, lines 51-64; col. 8, lines 8-10). In Example 1, Metzger-Groom teaches a detergent tablet comprising a compressed layer containing 26.40 wt% citrate, 26.40 wt% silicate, 1.50 wt% nonionic surfactant and non-compressed layer containing bicarbonate, citric acid, enzymes and polyethylene glycol (see col. 50, line 50 to col. 51). Metzger-Groom also teaches that the non-compressed portion may be delivered to the compressed portion by

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using a nozzle feeder or extruder (see col. 12, lines 21-23). Metzger-Groom teaches the limitations of the instant claims. Hence, Metzger-Groom anticipates the claims.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 7-9, 11, 13, 15-17, 19-20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Addison.

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Addison teaches the features as described above. In addition, Addison teaches that the tablet may be a multi-layer tablet wherein additional layers may be formed by compression and that the tablet comprises at least one compressed layer (see col. 1, line 66 to col. 2, line 2; col. 3, lines 35-38). Addison also teaches that the tablet prepared by compression comprises surfactants, enzymes, bleaching agents and bleach precursors like TAED (see col. 10, lines 7-17; col. 25, line 54+; col. 30, lines 12-13). Addison also teaches that the coating material is preferably paraffin oil, wax and/or solid having a melting point in the range from 20°C to 60°C (see col. 3, lines 50-55) and is present at a level of at least 4% of the detergent tablet (see col. 9, lines 35-39). The non-compressed portion may also include structure modifying agents or hardness modifying agents in levels of less than 20% by weight of the solvent in the thickening system (see col. 8, lines 17-36). Addison, however, fails to disclose separate compressed layers wherein one comprises bleaching agents and the other comprises enzymes or bleach activators.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare multi-layer tablets having two compressed layers and to separate ingredients which would interact with each other because Addison teaches that the tablet comprises at least one compressed layer wherein ingredients which would interact with each other are separated, see for example, Example 4.

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8. Claims 7-9, 11, 13, 15-17, 19-20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Painter.

Painter teaches the features as described above. In addition, Painter teaches that the compressed portion of the detergent tablet comprises at least one compressed detergent component, but preferably comprises a mixture of compressed detergent components (see col. 2, lines 35-37). Painter also teaches that the tablet prepared by compression comprises surfactants, enzymes, bleaching agents and bleach precursors like TAED (see col.9, lines 24-40; col. 24, line 41+; col. 28, line 56-57). Painter also teaches paraffin wax having a melting point in the range from 35°C to 110°C (see col. 41, lines 34-40). The non-compressed portion may also include structure modifying agents or hardness modifying agents in levels of less than 20% by weight of the solvent in the thickening system (see col. 6, lines 46-62). Painter, however, fails to disclose separate compressed layers wherein one comprises bleaching agents and the other comprises enzymes or bleach activators.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare multi-layer tablets having two compressed layers and to separate ingredients which would interact with each other because Painter teaches that the tablet comprises at least one compressed layer wherein reactive components of the detergent composition can be effectively separated as taught in col. 2, lines 7-9.



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9. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Addison, Painter or Metzger-Groom as applied to the above claims, and further in view of Capeci et al. (US Patent No. 5,516,448), hereinafter "Capeci".

Addison, Painter or Metzger-Groom teaches the features as described above. Addison, Painter or Metzger-Groom, however, fails to disclose the detergent composition to be tableted having a bulk density above 600 g/l and particle size distribution as those recited.

Capeci teaches similar detergent compositions prepared by agglomeration having a bulk density of at least 650 g/l (see col. 7, lines 1-4) and a more uniform particle size distribution (see col. 3, lines 5-10) wherein the median particle size of the agglomerate is from 300 microns to about 900 microns (see claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the bulk density and particle size distribution of the detergent composition of Addison, Painter or Metzger-Groom to be within those recited because detergent compositions prepared by agglomeration would have these characteristics as shown by Capeci.

***Allowable Subject Matter***

10. Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record teaches, discloses or suggests a process for the production

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of multiphase cleaning tablets in the manner as those recited, in particular wherein the cavity tablets are heated before filling with the melt suspension or emulsion.

11. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. The reference is considered cumulative to or less material than those discussed above.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (703) 305-3773. The examiner can normally be reached on Mondays-Fridays from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for this Technology Center is:

(703) 872-9311 - for Official After Final faxes  
(703) 872-9310- for all other Official faxes.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center receptionist whose telephone number is (703) 308-0661.

June 3, 2002

*Lorna M. Douyon*  
Lorna M. Douyon  
Primary Examiner  
Art Unit 1751